

Amendments to the Specification:

Please replace paragraph [054] beginning at page 12, line 15, which bridges to page 13, with the following rewritten paragraph:

-- Referring now to Fig. 2, the surface of the substrate to be grafted upon (represented by a cross-sectional view of a microchannel 210 in Fig. 2A) is enclosed and filled with a first monomer, e.g., a monovinyl monomer, a polyvinyl monomer, or a mixture of monovinyl and polyvinyl monomers 220, and a photoinitiator, such as an aromatic ketone like benzophenone, and then irradiated with UV light (Fig. 2A). This grafting step is carried out under conditions that only proceed to a low conversion. After removal of the excess monomer, a grafted polymer layer 230 containing a number of unreacted double bonds remains chemically attached to the substrate surface (Fig. 2B). The coated surface is then filled with a second monomer contained in a polymerization mixture 240 suitable for the preparation of the desired porous polymer monolith. The mixture is irradiated with UV light to initiate polymerization (Fig. 2C). The residual double bonds in the grafted polymer layer 230 on the surface of the channel 210 are incorporated in the growing polymer chains, thus bonding the monolith 250 to the substrate surface (Fig. 2D) through the polymerized layer 230. Subsequently a third monomer 260 may be utilized to add functionalities to the monolith ~~240~~ 250. The porous polymer monolith 250 is filled with the third monomer or its solution 260 and irradiated with UV light for a sufficient period of time (Fig. 2E) to graft the pore surface within the porous polymer monolith with this functional monomer to produce a channel having a porous polymer monolith containing functionalized groups 270 (Fig. 2F).

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